# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/710,492	07/15/2004	Michael Hui Du	68.0419	4491
35204	7590 06/09/2006		EXAMINER	
	ERGER RESERVOIR O	NEUDER, WILLIAM P		
	AIRLINE ROAD ARON, TX 77583		ART UNIT	PAPER NUMBER
Roomaton, III 1750			3672	
			DATE MAILED: 06/09/200	6

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/710,492	DU ET AL.				
Office Action Summary	Examiner	Art Unit				
	William P. Neuder	3672				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period or Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	•					
,	action is non-final.					
3) Since this application is in condition for allowa	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-42</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>33-42</u> is/are allowed.						
6)⊠ Claim(s) <u>1-32</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	er.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct	- · · · · · · · · · · · · · · · · · · ·					
11) ☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
<ul> <li>12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) ☐ All b) ☐ Some * c) ☐ None of:</li> <li>1. ☐ Certified copies of the priority documents have been received.</li> </ul>						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the prio						
application from the International Burea	u (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list	of the certified copies not receive	ed.				
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date						
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date <u>8/10/05,7/15/04</u>.</li> </ol>		Patent Application (PTO-152)				

Art Unit: 3672

#### **DETAILED ACTION**

### Claim Objections

Claims 27,28 and 38 are objected to because of the following informalities: In claims 27 and 28, line 2, no antecedent basis could be found for "the flapper". In claim 38, line 14, no antecedent basis could be found for "the protections fluid". Appropriate correction is required.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-32 are rejected under 35 U.S.C. 102(e) as being anticipated by French et al 6,494,269.

French discloses a well tool (figures 1-5) having a housing forming a protection fluid chamber 38. The chamber is in communication with a discharge port 48. A protection fluid is contained within the volume. A hydraulic fluid is located within the volume. Any hydraulic fluid is considered a protection fluid. A moveable mechanism 42 is in functional connection with the fluid chamber to expel a portion of the protection fluid when member 42 moves. As to claims 2,3,12,13,18 and 19, any hydraulic fluid is

Page 3

considered a high-viscosity or high-density fluid since applicant has not set forth what fluids the terms high-density and high-viscosity encompass. As to claims 4,16-18,20 and 29-32, a hydraulic fluid itself is a lubricant and therefore meets these claim limitations. As to claims 5 and 23, a flapper 26 is provided. As to claims 6 and 24, the discharge port 48 is located proximate the back of the flapper 26. As to claims 7 and 8, member 42 is a slide sleeve. As to claims 9 and 17, first slide sleeve 42 is in functional connection with a second side sleeve 31. As to claim 10, both slide sleeves are in functional communication with the flapper. As to claim 11, the fluid pressure exhausted from port 48 from chamber 38 serves to remove debris collected at the backside of the flapper. As to method claim 21, the fluid contained within chamber 38 is expelled out ports 48 proximate the flapper. As to claim 22, a moveable mechanism 42 is provided. As to claims 25 and 26, the expelling step includes moving member 42. As to claims 27 and 28, a further slide sleeve 30 carries the flapper 26 in that flapper 26 is pivotable mounted to this sleeve.

Claims 1-26 and 29-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnston et al 6,079,497.

Johnston discloses a well tool (see fig. 2) having a housing 18 forming a protection fluid chamber (interior space in 18). The chamber is in communication with a discharge port 50. A protection fluid is contained within the volume. A hydraulic fluid is located within the volume. Any hydraulic fluid is considered a protection fluid. A moveable mechanism 52 is in functional connection with the fluid chamber to expel a portion of the protection fluid when member 52 moves. As to claims 2,3,12,13,18 and

Art Unit: 3672

19, any hydraulic fluid is considered a high-viscosity or high-density fluid since applicant has not set forth what fluids the terms high-density and high-viscosity encompass. As to claims 4,16-18,20 and 29-31, a hydraulic fluid itself is a lubricant and therefore meets these claim limitations. As to claims 5 and 23, a flapper 26 is provided. As to claims 6 and 24, the discharge port 50 is located proximate the back of the flapper 26. As to claims 7 and 8, member 42 is a slide sleeve. As to claims 9 and 17, first slide sleeve 42 is in functional connection with a second side sleeve 46. As to claim 10, both slide sleeves are in functional communication with the flapper. As to claim 11, the fluid pressure exhausted from port 50 from chamber (inside housing 18) serves to remove debris collected at the backside of the flapper. As to method claim 21, the fluid contained within chamber is expelled out ports 50 proximate the flapper. As to claim 22, a moveable mechanism 52 is provided. As to claims 25 and 26, the expelling step includes moving member 52.

#### Allowable Subject Matter

Claims 33-42 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Neuder whose telephone number is 571-272-7032. The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/710,492 Page 5

Art Unit: 3672

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

William P Neuder Primary Examiner Art Unit 3672

W.P.N.